System crashes with the panic string of:"PANIC: CPU X: TLBMISS: KERNEL FAULT" in "pcibr_intrd"

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Symptom(s):

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System crashes with the panic string of:"PANIC: CPU X: TLBMISS: KERNEL FAULT" in "pcibr_intrd"
The stack shows:
STACK TRACE FOR XTHREAD 0xa800000000b8e800 (pcibr_intrd[0x2):

 1 dumpsys[../os/vmdump.c: 528, 0xc0000000002c5e40]
 2 syncreboot[../os/printf.c: 1677, 0xc0000000002ae610]
 3 icmn_err_tag[../os/printf.c: 593, 0xc0000000002acf80]
 4 cmn_err[../os/printf.c: 159, 0xc0000000002ac260]
 5 panicregs[../os/trap.c: 258, 0xc00000000025a098]
 6 tlbmiss[../os/trap.c: 3275, 0xc00000000025d410]
 7 VEC_tlbmiss[../ml/LOCORE/vec_tlbmiss.s: 41, 0xc00000000006f1c0]
     r0/zero:0000000000000000   r1/at:a800000000a30000   r2/v0:a800000000a21800
       r3/v1:0000000000000000   r4/a0:0000000000000000   r5/a1:0000000000000000
       r6/a2:0000000000000006   r7/a3:a800000000a218f0   r8/a4:0000000000000000
       r9/a5:0000000000000000  r10/a6:a8000000a16594c0  r11/a7:0000000000000000
      r12/t0:0000000000000098  r13/t1:0000000000000002  r14/t2:00000000000068a1
      r15/t3:a800000000a30000  r16/s0:a80000004280d470  r17/s1:0000000000000005
      r18/s2:0000000000000017  r19/s3:0000000000000001  r20/s4:0000000000000001
      r21/s5:000000000000001c  r22/s6:0000000000000002  r23/s7:000000000000001c
      r24/t8:0000000000000000  r25/t9:a800000000a34000  r26/k0:a800000000a30000
      r27/k1:c000000000000000  r28/gp:c00000000017652f0  r29/sp:a80000004280d410
      r30/s8:0000000000000000  r31/ra:c000000000077c00     EPC:c0000000000a024c
          CAUSE=ffffffff80008408, SR=68a3, BADVADDR=c0000fc000000000
 8 xtalk_pio_target_get[../io/xtalk.c: 704, 0xc0000000000a024c]
 9 hub_ioerror_handler[../ml/SN/SN1/hubio.c: 335, 0xc000000000077bf8]
10 kl_ioerror_handler[../ml/SN/klerror.c: 1836, 0xc00000000005ec90]
11 handle_io_buserr[../ml/SN/klerror.c: 1007, 0xc00000000005d6d8]
12 dobuserre[../ml/SN/klerror.c: 546, 0xc00000000005cdcc]
13 k_trap[../os/trap.c: 412, 0xc00000000025a200]
14 trap[../os/trap.c: 734, 0xc00000000025a660]
15 VEC_trap[../ml/LOCORE/vec_trap.s: 62, 0xc00000000006597c]
     r0/zero:0000000000000000   r1/at:c00000000168b030   r2/v0:92000002e0000000
       r3/v1:0000000000000010   r4/a0:a800000000bb3900   r5/a1:0000000000000005
       r6/a2:0000000000000001   r7/a3:a80000004280da68   r8/a4:a80000004280d948
       r9/a5:000000000000001a  r10/a6:c0000000000a1ed8  r11/a7:0000000000000009
      r12/t0:0000000000000045  r13/t1:0000000000000002  r14/t2:a800000000b92cf0
      r15/t3:a800000000a30080  r16/s0:0000000000000001  r17/s1:0000000000000009
      r18/s2:0000000000000005  r19/s3:0000000000000001  r20/s4:a800000000bb3900
      r21/s5:a80000004280da68  r22/s6:0000000000000002  r23/s7:000000000000001c
      r24/t8:0000000000000001  r25/t9:a800000000b92000  r26/k0:c0000000002d9a9c
      r27/k1:a80000004280dd98  r28/gp:c00000000017652f0  r29/sp:a80000004280d908
      r30/s8:0000000000000000  r31/ra:c0000000000a0110     EPC:c0000000000a1f20
          CAUSE=841c, SR=68a3, BADVADDR=92000002e000000c
16 xbow_error_handler[../io/xbow.c: 1192, 0xc0000000000a1f20]
17 xtalk_error_handler[../io/xtalk.c: 584, 0xc0000000000a0108]
18 hub_xp_error_handler[../ml/SN/SN1/hubio.c: 192, 0xc00000000007788c]
19 hub_ioerror_handler[../ml/SN/SN1/hubio.c: 399, 0xc000000000077b54]
20 kl_ioerror_handler[../ml/SN/klerror.c: 1836, 0xc00000000005ec90]
21 handle_io_buserr[../ml/SN/klerror.c: 959, 0xc00000000005d748]
22 dobuserre[../ml/SN/klerror.c: 546, 0xc00000000005cdcc]
23 k_trap[../os/trap.c: 412, 0xc00000000025a200]
24 trap[../os/trap.c: 734, 0xc00000000025a660]
25 VEC_trap[../ml/LOCORE/vec_trap.s: 62, 0xc00000000006597c]
     r0/zero:0000000000000000   r1/at:ffffffffa1008041   r2/v0:0000000000001000
       r3/v1:0000000000000001   r4/a0:a800000041c00000   r5/a1:9200000209400000
       r6/a2:a80000009428d000   r7/a3:0000000000002300   r8/a4:0000000000002300
       r9/a5:0000000000000000  r10/a6:a800000000a23000  r11/a7:000000000000000cd
      r12/t0:000000000000ffa0  r13/t1:0000000000000001  r14/t2:00000000000068a1
      r15/t3:a80000009428d000  r16/s0:a800000041c00000  r17/s1:a80000009428d000
      r18/s2:a800000041c00190  r19/s3:0000000000000001  r20/s4:c000000004b6c000
      r21/s5:c000000001651e68  r22/s6:c0000000016abaf8  r23/s7:0000000000000001
      r24/t8:0000000000000001  r25/t9:0000000000000000  r26/k0:a80000004115 18d8
      r27/k1:fffffffffffb008  r28/gp:c00000000017652f0  r29/sp:a80000004280df00
      r30/s8:a800000041c00000  r31/ra:c0000000004 94fa8     EPC:c0000000004950e4
          CAUSE=841c, SR=68a3, BADVADDR=9200000209400018
26 qlfc_intr_service[../io/qlfc.c: 4439, 0xc0000000004950e4]
27 qlfc_intr[../io/qlfc.c: 4418, 0xc000000000494fa0]
28 pcibr_intrd[../io/pcibr/pcibr_intr.c: 219, 0xc0000000000acd7c]
29 xthread_prologue[../os/swtch.c: 1643, 0xc0000000002da84c]
30 xtresume[../os/swtch.c: 1691, 0xc0000000002da918]
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Fact(s):

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SGI Origin 300
IRIX 6.5.20
PCI expansion module PE-Brick
Multiple Gigabit Ethernet and QLogic Fibre-channel cards in the PE-Brick
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SGI Solution:

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Replaced the XTown cable.
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Cause(s):

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In this particular case, the XTown cable between the PE-Brick and the C-Brick had a damaged pin.
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Answers others found helpful

- How to run Field Stress Diagnostics (FST)
- flashsc for L1 on multiple O350 bricks fails for anything newer than version 1.40.6.
- How to make large filesystems

Additional Details

Creation Date	02/12/2004 09:52 AM
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